

**METHOD AND BASE STATION FOR PROVIDING PHASE-SHIFT TRANSMIT  
DIVERSITY**

**Abstract of the Disclosure**

5 In accordance with the preferred embodiments of the present invention, a method (400) and a base station (140) for providing phase-shift transmit diversity in a wireless communication system are described herein. The base station (140) phase-shift modulates a first signal with a reference signal to produce a first phase-shift modulated signal including a first phase shift. Further, the base station phase-shift modulates a  
10 second signal with the reference signal to produce a second phase-shift modulated signal including a second phase shift. The second phase shift is distinct from the first phase shift such that the second phase-shift modulated signal is diverse relative to the first phase-shift modulated signal. Accordingly, the base station transmits the first phase-shift modulated signal via a first antenna and the second phase-shift modulated signal via a  
15 second antenna to a plurality of mobile stations.